

## JP 444592

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**Heat sensitive recording sheet - comprises dye, developer, and binder**

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Patent Family ( 2 patents, 1 countries )

Patent Number	Kind	Date	Application Number	Kind	Date	Update	Type
JP 61092890	A	19860510	JP 1984213781	A	19841012	198625	B
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JP 1992044592	B	19920722	JP 1984213781	A	19841012	199233	E

Patent Details					
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JP 61092890	A	JA	4	0	
JP 1992044592	B	JA	4		Based on OPI patent JP 61092890

**Alerting Abstract JP A**

Heat-sensitive recording sheet contains (a) colourless or pale-coloured dye precursor, (b) developer developing (a) under heating, (c) binder consisting of water-soluble polymer and (d) ester cpd. of (d1) boric acid or lower alcohol triborate with (d2) two or more kinds of polyhydric alcohol having adjacent OH gp. in (A) a heat-sensitive colour-forming layer.

Cpd. (d1) is, e.g. trimethyl borate, tripropyl borate or triisopropyl borate. Cpd. (d2) is, e.g., ethylene glycol, tripropyl borate or tributyl borate. Dye (a) is e.g., triphenylmethane series, fluoran series, diphenylmethane series, thiazine series or spiropyran series cpds. Cpd. (b) is e.g., phenol, naphthol, 4,4'-isopropylidene diphenol or methyl p-hydroxybenzoate. Binder (c) is a water-soluble binder or latex series water-insoluble binder. USE/ADVANTAGE - Cpd. (d) is very compatible with water-soluble polymer cpds. and imparts proper viscosity and makes the surface of the hydrophobic substance in (A) hydrophilic. This improves the adhesiveness of (A) to the support. The heat-sensitive recording sheet has improved adhesive force, improved water resistance and is prevented from piling, sticking, blocking and dusting. The recording sheet is useful for various printer, facsimile, per cord label, tickets, etc..

**Title Terms /Index Terms/Additional Words:** HEAT; SENSITIVE; RECORD; SHEET; COMPRISE; DYE; DEVELOP; BIND

**Class Codes**

## International Patent Classification

IPC	Class Level	Scope	Position	Status	Version Date
B41M-005/26			Main		"Version 7"
B41M-005/18			Secondary		"Version 7"

File Segment: CPI; EngPI

DWPI Class: E12; E14; E24; G05; P75

Manual Codes (CPI/A-N): E05-C; E10-E04H; G06-A01; G06-F08

**Chemical Indexing**

Derwent Registry Numbers: 0470-U; 0566-U; 0689-U; 0822-U; 0868-U; 1110-U; 1894-U

Chemical Fragment Codes (M3):

\*01\* M903 B105 B405 B713 B720 B803 B831 C101 C108 C800 C802 C804 C805 C807  
M210 M211 M212 M213 M214 M215 M216 M220 M221 M222 M231 M232 M233 M272  
M283 M320 M411 M510 M520 M530 M540 M620 M730 M782 Q339 R023 R043  
\*02\* M903 H4 H402 H403 H404 H405 H482 H483 H484 H8 M280 M312 M313 M314 M315  
M321 M331 M332 M333 M342 M343 M344 M383 M391 M416 M620 M730 M782 Q339  
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#### **THERMAL RECORDING SHEET**

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